

Antikythera Computer

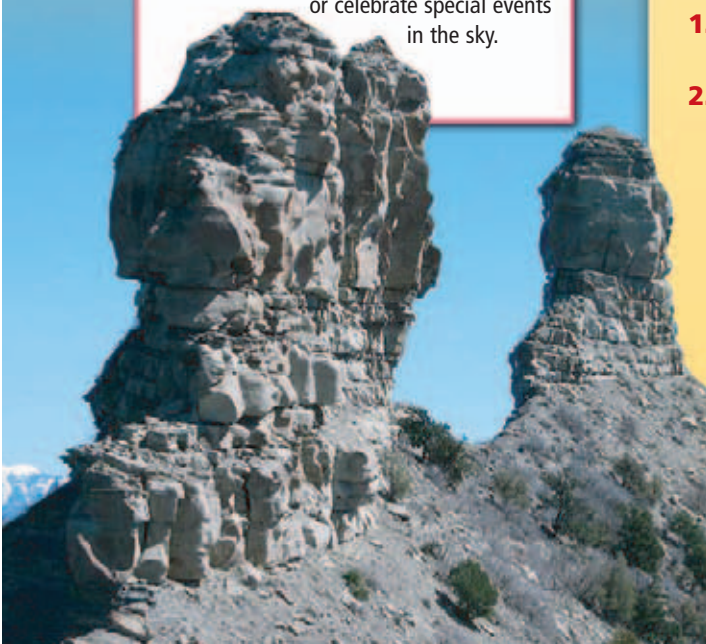
A device with gears and dials was found in an ancient Greek shipwreck. While examining the device, a scientist noticed terms, patterns, and numbers from astronomy. These observations led him to form a hypothesis that ancient Greeks used the instrument to calculate the positions of the Sun, Moon, and other bodies in space.

Gamma-ray images of the instrument's interior later supported this hypothesis.



Chimney Rock

Chimney Rock, in Colorado, is topped by two natural pillars of rock. The Moon appears to rise between the pillars under special circumstances that happen about every 18 years. Near the pillars are ruins of buildings of the Anasazi people. In order to construct the buildings and live here, the builders had to haul materials and water much farther than was usual. Some archaeologists hypothesize that the Anasazi built here in order to watch or celebrate special events in the sky.



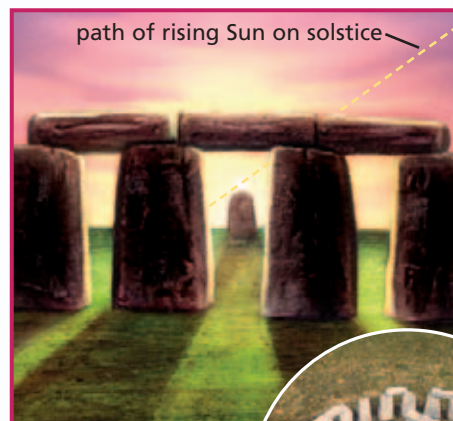
Astronomy in Archaeology

In order to understand how people lived and thought long ago, archaeologists study the buildings and other physical remains of ancient cultures. Archaeologists often think about what needs people had in order to figure out how they used the things they built. For example, people needed to know the time of year in order to decide when to plant crops, move to a different location for winter, or plan certain ceremonies.

Archaeologists can use their knowledge about objects in the sky to hypothesize about the purpose of an ancient structure. They can also use knowledge and models from astronomy to test their hypotheses. For example, archaeologists found some structures at Chimney Rock that were built at times of special events in the sky.

Stonehenge

Stonehenge is an arrangement of stones in Britain. The first stones were placed there around 3100 B.C. The way that the Sun and Moon line up with the stones has led some archaeologists to think that they were designed to help people predict solstices and eclipses. Solstices tell people the time of year, so Stonehenge has sometimes been called a calendar.



Stonehenge as seen from above



EXPLORE

- 1. COMPARE** How is each archaeological example related to astronomy?
- 2. CHALLENGE** Make a list of five print or television advertisements that feature the Sun or other objects in the sky. Bring in copies of the advertisements if you can. Why might the advertisers have chosen these objects?



Ruins of buildings were found on a high, narrow ridge at Chimney Rock.